

REMARKS

Claims 1-25 are pending in this application. Claims 1, 5, 6 and 19-23 have been amended here. Claim 18 is canceled. Applicant respectfully requests reconsideration of the claims in view of the following remarks.

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Farnworth (U.S. Patent No. 5,933,713) and Heo (U.S. Patent No. 5,908,317) separately. Applicant respectfully traverses these rejections.

Claim 1 as amended recites that "the connection area comprises a compliant 3D structure." In contrast, Farnworth does not teach or suggest a compliant 3D structure. Farnworth discloses and suggests use of a casting compound in conjunction only with conductive bumps. Farnworth, col. 5, l. 37-39; Farnworth, col. 8, l. 35-45.

Similarly, Heo does not teach, or suggest compliant 3D structure. In contrast, Heo discloses using the casting compound in conjunction only with "a bump with a [vertical] tail". Heo, col. 4, l. 8-10; Heo, col. 5, l. 61-65. If the prior art reference lacks an element of a claim at issue, the reference cannot anticipate that claim under 35 U.S.C. §102. *Carman Indus., Inc. v. Wahl*, 724 F.2d 932, 938 (Fed. Cir. 1983). Therefore, Farnworth and Heo do not teach or suggest the limitations of claim 1 of the present application.

Claim 1 is rejected under 35 U.S.C. §102(e) as being anticipated by Stepniak (U.S. Patent No. 6,916,684). Applicant respectfully traverses this rejection. Stepniak is limited to applications involving solder bumps. Stepniak, col. 4, l. 9-11 ("devices that are attached by reflowing solder bumps are ... within the scope of this invention"). Thus, Stepniak does not teach or suggest the use of a compliant 3D structure, and therefore cannot teach or suggest the limitations of claim 1 of the present application.

Claim 1 is rejected under 35 U.S.C. §102(e) as being anticipated by Hiatt (6,673,649). Applicant respectfully traverses this rejection. Hiatt discloses “electrically conductive coupler” as comprising the conductive areas. Hiatt, col. 2, l. 13-17. However, throughout the entire patent disclosure, Hiatt consistently refers only to solder or similar re-flowable material as comprising the coupler. Hiatt, figs. 1-7B; Hiatt, col. 2, l. 23-25 (“flowable electrically conductive couplers”); Hiatt, col. 4, l. 15-20 (“other conductive materials that can be reflowed after being applied to the microelectronic substrate”). Hiatt does not teach or suggest the use of a compliant 3D structure, and therefore does not teach or suggest the limitations of claim 1 of the present application.

Claim 1 is rejected under 35 U.S.C. §102(e) as being anticipated by Hsieh (6,790,758). Applicant respectfully traverses this rejection. Hsieh relates only to metal bumps, and does not teach or suggest the use of a compliant 3D structure. Hsieh, figs. 1-3. Therefore, Hsieh does not teach or suggest the limitations of claim 1 of the present application.

Claim 1 is rejected under 35 U.S.C. §102(e) as being anticipated by Storli (6,885,101). Applicant respectfully traverses this rejection. Storli relates only to solder balls, and does not teach or suggest a compliant 3D structure. Storli, figs. 1-4. Therefore, Storli does not teach or suggest the limitations of claim 1 of the present application.

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over Luo (6,885,108) in view of Chakravorty (6,181,569). Claim 1, as amended recites, “after applying a casting compound, reducing a thickness of the casting compound so that the connection area protrudes through the casting compound.” Although Luo discloses that the invention may be used in conjunction with “a conductive structure ... such as ... a conductor filled elastomer, a conductive elastomer, or other suitable material for forming electrical connections”, Luo does not teach or

suggest that the thickness of the casting compound is reduced so that the connection area protrudes through the casting compound. Luo, col. 4, l. 60-65. Further, Chakravorty fails to teach or suggest this limitation. It is therefore respectfully submitted that the references of record do not teach or suggest the limitations of claim 1.

Claims 2-20 depend from claim 1 and add further limitations. Claim 18 has been cancelled, and its limitations incorporated into claim 1. Claims 19 and 20 have been amended to reflect the correct dependence. Applicant respectfully submits that these claims are allowable by reason of depending from an allowable claim as well as for adding further limitations.

Claim 21 has been rejected for the same reasons as claim 1. Applicant respectfully traverses these rejections. Claim 21 as amended recites, "the method characterized in that a casting compound is applied over the top surface of the device, and excess thickness of the casting compound is reduced, in such a way that tips of the 3D structures protrude from the compound, wherein the 3D structures comprise a compliant 3D structure". As discussed above for claim 1, none of the references of record teach or suggest, either alone or in combination, the use of a compliant 3D structure and reducing the thickness of the casting compound used in conjunction with such structure. Therefore the references of record do not teach or suggest the limitations of claim 21.

Claims 22-25 depend from claim 21 and add further limitations. Applicant respectfully submits that these claims are allowable by reason of depending from an allowable claim as well as for adding further limitations.

Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Ira S. Matsil, Applicant's attorney, at 972-732-1001 so that such issues may be resolved as expeditiously as possible. No fee is believed due in connection with this filing. However, should one be deemed due, the Commissioner is hereby authorized to charge Deposit Account No. 50-1065.

Respectfully submitted,



Ira S. Matsil
Attorney for Applicant
Reg. No. 35,272

February 10, 2006
Date

SLATER & MATSIL, L.L.P.
17950 Preston Rd.
Suite 1000
Dallas, Texas 75252
Tel.: 972-732-1001
Fax: 972-732-9218